

INTERVIEW WITH WILLIAM MARTIN
BY JERRY GROVER JANUARY 30, 2002

MR. GROVER: Would you introduce yourself?

MR. MARTIN: I am Bill Martin.

MR. GROVER: What was the job that you retired from?

MR. MARTIN: I was Deputy Regional Director here in Portland, the Pacific Northwest and the Pacific Highlands.

MR. GROVER: And when did you retire?

MR. MARTIN: I retired in the first week or so of January in 1994.

MR. GROVER: That's been a nice long retirement already.

MR. MARTIN: Yes, I'm getting used to it.

MR. GROVER: And you like it, I bet.

MR. MARTIN: Yes, I do.

MR. GROVER: How did you get started? Tell us a little bit about yourself. Where were you born?

MR. MARTIN: I was born in San Bernardino, California. But as soon as I could walk, I got out of there, and went to Colorado. When I was twelve, I went with my mother, brother and her new husband to Europe, to Germany. I spent eight years over there. I came back to go college. I worked over there for a couple of years on the economy. That means I worked with the Germans, but not in the military. I came back and went to Colorado State University in 1954, from 1954 to 1958. I got a commission as a second Lieutenant with the Air Force and went out to the other end of the country, to Korea for my tour of one year. It was thirteen months, and seven days, I think. I came back and put some time in at Tindale Air Force Base, an ADC facility.

MR. GROVER: Was that Tindale Air Force Base in Florida?

MR. MARTIN: Yeah. That's an Air Defense Command facility that tests our capabilities all over the world for intercepting incoming, unfriendly aircraft. I was based out of Supply. And I had the flight side of the Base there. It was a very interesting job, but not really all that challenging. So I came back looking for a job, and I couldn't get one,

so I went back to school. Again, I went to Colorado State, and got a Master's. I came out of there and worked with Colorado Game and Fish on some of their traditional research for a little bit. Then Don Spencer gave me an opportunity to work in Pesticides. He had just started a new capability in the Department of Agriculture where pesticides were regulated at the time; as a result of Rachel Carson's book and the general concern about contaminants, particularly pesticides and their chronic affects on people. The Pesticide Regulation Division was suddenly concerned about the registration of pesticides that were in fact harmful to the environment as measured by various critters, and subsequently, to people.

MR. GROVER: What was your degree in Bill that led you into this?

MR. MARTIN: As I go through this whole thing, you'll find that I have never been prepared for any job that I ever had. My degree was in Natural Resource Administration Public Relations. That was my Master's degree. My undergraduate was in Big Game Management. I never managed big game professionally.

MR. GROVER: But that led to a beginning career in Pesticides!

MR. MARTIN: Well, you go where the money is. When you're hungry you get a job.

MR. GROVER: What year was that when Spencer [hired you]?

MR. MARTIN: That was in 1963, in Beltsville, MD. Don Spencer was one of those people that worked on that chemical "10-80" right after the Second World War. He was a Research Biologist for Animal Damage Control, which was a big operation at the time.

MR. GROVER: Was that in the Department of the Interior at the time?

MR. MARTIN: It was in Interior with the Bureau of Sport Fisheries and Wildlife. The Research Center was where the Denver Federal Center is right now. It would be the east gate of the Federal Center. There used to be quite a large rodent colony there that was contained. A lot of animal control agents were tested there. There were "10-80", thallium sulfate. Some really nasty stuff was tested there, and Don was a major actor in that operation and research. If you look at anything in the 1940's and 1950's in the library, you'll find his name [to be] very prominent. He had a brand new laboratory out there where we were going to test not only the claims that are made of chemicals and their ability to control animals, mostly to kill them; but also, later on, I developed a protocol for testing chemicals and look at their unwanted affects, particularly to fish.

MR. GROVER: What was your particular job? What did he have you doing?

MR. MARTIN: I was a Research Biologist; I guess that's what they called it. I went out there, and this ties in with the Service all along here, in that the head of that new

laboratory was a fellow by the name of Ludiman, John Ludiman, who had formerly been the Animal Damage Control Supervisor in southern California. He had worked with Spencer. There was also a relationship through marriage there, but that's not really significant. His sister was Don's wife. Two days before I arrived at that Laboratory, it burned down. But one wall was left, so in keeping with what I had learned in the military in Supply, and what I came to know very well with the government; if there's anything left standing you don't rebuild, you re-hab. You don't tear the whole thing down and try to get an authorization to build a new building. You rehabilitate what you have. So one wall of that facility is still encased in ceramic tile. The entire building was redone as a re-hab operation. That is the Fish and Wildlife testing facility at Beltsville [Maryland]. It is right underneath the tower. Part of the things that I was doing there involved Avacides [Sic?] and things to keep Starlings off of the White House lawn and things like that. I was in the process of developing some traps and holding facilities and whatnot to maintain those when I went across the freeway, the Baltimore/Washington Parkway to Patuxent. I met Bill Stickle there. His wife Lucille is the more noted one, perhaps. She was the Director of the Patuxent Research Station for a number of years. She pretty much followed in the footsteps of Rachel Carson in her ability to assimilate information from many researchers and put it in a context that people could understand. Her husband Bill was really an outstanding Research Biologist. He's the fellow, who did some early work on Gulls, and Kestrels, and the eggshell thinning kinds of things that were developed in the research of DDT primarily. That was my introduction to the Contaminant world in the Fish and Wildlife Service.

MR. GROVER: What grade were you at that time?

MR. MARTIN: I went in as a GS-7. I think I got a promotion when I went into Washington after two years. Because they needed someone to review labels on pesticide containers to make sure that they had the proper precautions for people to aware of; such as, I've got a whole bunch of them here; "This product will kill birds and other wildlife". "Keep out of any body of water, Keep out of lakes, streams and ponds". And by golly you know that that is enduring literature because you can pick up a pesticide container today and read those same words that I wrote back in 1965. I worked with Pesticide Regulation Division U.S. Department of Agriculture, from 1965 to 1967, in the Agriculture Building, just off of the Mall. In 1967 I came with the Fish and Wildlife Service. The Service was establishing a new... well they were reorganizing to a certain extent, maybe they were organizing. The Division of Wildlife was established as a major outgrowth from Predator and Rodent Control, and Refuges, which was one of the early Bureau of Sport Fisheries and Wildlife.

MR. GROVER: So this reorganization was establishing a Wildlife Division that was separate from Refuges?

MR. MARTIN: Right. The Division of Wildlife Services is what it was called. It contained Predator and Rodent Control, Pesticide Appraisal and Monitoring, and Wildlife Enhancement. There were three branches. Dan Stiles was the Enhancement Biologist.

You might want to talk to Dan. He took the job there, and I think Dan has been in Washington for his entire career. He might be fellow to contact, if you haven't already.

MR. GROVER: What was that name again?

MR. MARTIN: Animal Biologist in the Pesticide Regulation Division. That was in both of the jobs. From 1963 to 1967 that was my job title. In 1967 I became the Chief in Pesticide Appraisal and Monitoring—Division of Wildlife Services.

MR. GROVER: What was your grade at that time?

MR. MARTIN: I'll come back to that I think. I'll have to check on that. But there are some stories right there, and you need an overview first right?

MR. GROVER: OK.

MR. MARTIN: I am probably going on too much on some of this stuff. I was there from 1967 to 1972, at which time I finally convinced, I had the name on the tip of my tongue, well, I convinced him that no one was essential in Washington. I got a job outside of Washington, and that was in River Basin Studies. So I am leaving my Contaminant roots and going to another area of constant warfare. And that's River Basin Studies. I moved there in 1972 to the Twin Cities. The reorganization caught up with us again in 1973, so I saw the last of River Basin Studies. That operation was folded into what is called Ecological Services as well as all of Wildlife Services, that I had been in before. So Pesticides, Enhancement Operations, I am sorry, Animal Control wasn't included. Animal Control was kept as a separate operation. Pesticides, Enhancement and River Basin Studies the three of them were folded into one group, Ecological Services.

MR. GROVER: That was in 1973?

MR. MARTIN: That was in 1973, yes. The names change from time to time. In 1976, with the formation of Area Offices, that became the Assistant Regional Director of Environment. From 1976 to 1978 I was in that position in the Twin Cities in which, well, I am sure that you have some references to the reorganization of Area Offices and whatnot. I participated in some of that stuff. In 1978, I got a lateral transfer to Denver in the same job. But getting home. Some roots were very deep in the front range of Colorado. I was in Denver until 1989 when I came to Portland as the Deputy Regional Director. And that ends with my retirement here. So we have included your first phase of discussion, with most of it on the early stages.

MR. GROVER: Bill, some time in there, Nancy must have come into the picture.

MR. MARTIN: Yeah. Nancy and I went to the same High School, separately, in Germany. Her mother was a Court Reporter at the War Crimes trials in Nuremberg. My step-dad was, in Nuremberg, the American side Mayor. What happened when the Allies first came into Germany was that each town, as they progressed in what they called

“civilianization” of Germany, they matched the German Mayor with an American Mayor. All of the little towns and big towns and everything else had this kind of set up. It was kind of an interesting thing where Germans and Americans ran in tandem, in very similar jobs. It was probably a good strategy. And it is probably the reason that Germany is such a strong Democracy today. Really it is. My step-dad, Dan Roberts was the American side Mayor of Nuremberg at that time when we were in Nuremberg. I lived in Munich, Nuremberg, Frankfurt, and Hamburg at one time or another in my eight years there in Germany. When we came from Munich to Nuremberg, Nancy and her mother left and went to Frankfurt about two weeks before we arrived. And when I went to Frankfurt, I think Nancy left in about the same amount of time. We missed each other, but we know the same people during those high school years.

MR. GROVER: It sounds like you had a hard time getting together though.

MR. MARTIN: Yeah, so time goes by and when I got this job; you know, the one where I mentioned that you go where the job is, and if you get hungry you’ll work at just about anything; and I became a Pesticide guy, and I barely got through Organic Chemistry. My brother was out in Washington, D.C. working with IBM and said that there was a group of guys renting a house, and they had an extra room. If I wanted to, I could at least share costs, so I did. Nancy had just moved out of an apartment to a similar house of girls that was about four blocks away. And one of the girls worked a deal with one of the guys in the house that I was in for carpooling into town. One thing led to another and we got together, and met. About eight or nine months after that, we got married. So that’s the story of Nancy and I. She’ll probably tell the story better than I do because she has all of the human-interest parts. But anyway, that’s how I met Nancy. She was working with the National Science Foundation at the time. She is a Chemist by training, and had been out to California and all over the place. She kind of landed in Washington I think, because her sister was there and it was an interesting place to be. The boys came along pretty darn quick afterwards; a year, a year and a year. We got married in 1964, and had a boy in 1965 and a boy in 1966; I think that’s it 1967 and 1968. I’ve got to be careful about that too.

MR. GROVER: You have two boys?

MR. MARTIN: Yes. I didn’t have chance. I got to the Washington area, and before a year was past, I was married and before the next year had past, I had a kid. And the next year, another one. Our two boys are eleven months apart. So, so much for fertility!

MR. GROVER: Bill, let’s talk a little about your job and some of the particulars of the Pesticides and Contaminants program back in Washington.

MR. MARTIN: The Pesticides program in the Division of Wildlife Services was set up in 1968. Incidentally, Bill Gussy was the first Chief of that operation. He was there for about a year and a quarter before I came. And Bill became the Deputy Chief of the Division, and I became Chief of Pesticide Appraisal and Monitoring. His experience was again in predator and rodent control out of Montana.

MR. GLOVER: What was your grade at this time?

MR. MARTIN: I came in as a "12", and left as a "14". The Division, in and of itself was to provide technical assistance and review to the Animal Damage Control operation in the field methods that they used. Somewhere in here I have a rundown on all of the chemicals that they were using and the hazards and the method of how the chemicals worked and that kind of stuff. This was one of the major things that I did, was actually provide some support to the Animal Damage Control operations.

MR. GROVER: Was there good political and funding support at this time? This followed right on the heels of Rachel Carson.

MR. MARTIN: Yes. There was very strong support for Animal Damage Control. The Humane Society of the United States was just starting to build membership and eventually they used the Predator Control program of the Service to build quite a large membership. That operation eventually ended with it going to Agriculture during one of the last reorganizations during my career. But also part of the job was to share label and use compliance with the state and federal pesticide regulation divisions, of the chemical used by the wildlife services. For the first time I believe, the government was recognizing that they were held to the same compliance restrictions as industry and the private individual. Here's a case where the government was having to assure that their use of pesticides, in particular, were consistent with the label instructions. That was part of my job. Technical assistance in field use patterns, and in some cases the testing of chemicals on fish and wildlife. I did a number of collections, evaluation and reporting of pesticide residue samples. At that time there was a publication called the National Pesticide Monitoring Journal, and I have copies that have summaries of our findings on mercury, lead, and organochlorines and things like that. That was published back in the 1970's. When Wildlife Services was established; I'll speak only to the Pesticide Appraisal and Monitoring aspect of it, the Appraisal had to do with the internal assurance that we were not stepping in our own mess. The Monitoring was to evaluate what was already in existence out in the United States. The Fisheries Services did a number of, which incidentally, Brudge Henderson is the name. Brudge was heading up the Fisheries Monitoring Program, Operations side out of Fort Collins at about the same time. And I was heading up the Wildlife side of it out of Washington, as part of my job. We did Starlings primarily because they were found all across the United States. They were an unprotected species, and they eat all kinds of stuff and are very good collectors of DDT and organochlorine chemicals. I set up a statistical design to monitor or to sample the entire United States. In the field, each Regional office had one person that the Pesticide Appraisal and Monitoring branch. They were responsible for making sure that the collections were made, and that they were packaged properly and shipped to the Wisconsin Alumni Research Center. That was the facility that we were using and they are the same facility that developed Warfarin, or Coumadin, which was a rat poison at the time and was developed into a very important blood thinner. It is a medical chemical these days. We used their facilities for analyzing our Starlings. I do have an interesting story along those lines, with Jim Elder out of Minneapolis. We had a pretty good system

for collecting Starlings. Sometimes we'd have to shoot them. That was one of the early uses of steel shot, incidentally. We were testing for lead, and of course you couldn't use lead shot pellets from a shotgun to take your samples. Jim had made a collecting, and according to the rules, had put it in a Styrofoam container with dry ice and shipping it. And you think that the airlines, *now* loose you baggage? Well, when they loose the sample of Starlings for a week and a half or two weeks, the dry ice evaporates and the Starlings start to work. When the guy finally found it, I think it was at Northwest Airlines they identified it by smell and told Jim that his package was there to be picked up. He said that he didn't know anything about a package. We recollected that sample! A bird can pick up a pretty strong odor, but a Starling, a dead Starling has an odor that you won't forget! Apparently, this sample had turned to liquid by the time they found it. Well, that's the story on Jim, and his failure to send in the first sample. I am glad he didn't.

There was a Federal Committee on Pest Control established in the federal government, again, as an outgrowth of Rachel Carson at this period of time in the early 1960s. And the Federal Committee on Pest Control was responsible for reviewing all use of chemical control agents, by all federal agencies. Before a federal agency had approval to use anything at all, it had to go through the FCPC. I worked on that one. And an out shot of that one was another interesting experience with a fellow by the name of Emo Mrak. Emo was a Professor Emeritus from University of California at Berkley. He was a Professor of the only degree given in wine making. It was given there, and he was the Professor that taught winemaking. That sounds kind of strange. But for some reason, his background, and I don't really know what it was, but he was selected by the President to head up a committee that would classify pesticides as to their hazards and utility. The final report on that was logically called the Mrak Report. I was picked because of my background with the registration of pesticides and some of this business I had with the Service. I had to go out to Berkley with a Pharmacologist and a Chemist. I think it was just the three of us. We sat down and we classified all of the pesticides that were on the market at that time. We did it in about a week. The up shot of all of that, is that the restricted use chemicals that you now see are very familiar to me because they are old buddies that I recognized a long time ago. There are some of those that we didn't classify as being a high hazard that are now actually restricted. Things like Sevin for example, even Malathion, some of those are no longer commonly used. But at one time they were some real nasty chemicals that were being scattered around. There were things for Termite control like Chlordane and Endron and Aldron around the house that were really bad news.

MR. GROVER: Was there any attempt at this time, or through this committee to identify certain chemicals that shouldn't be used under any circumstances? Did you guys do this?

MR. MARTIN: Yes, the up shot of this was the cancellation of DDT. DDT, Deldron, Endron, Aldron, pretty much in that order. Although Endron and Aldron are similar to each other. Pretty much in that order, they were taken off of the market totally.

MR. GROVER: That was a result of this committee?

MR. MARTIN: That was a result of this kind of activity.

MR. GROVER: That sounds like a very important, major step for the government.

MR. MARTIN: That's why I mention it. It took us a week. And part of that was that I go to sample some of Dr. Mrak's wine cellar. Actually, his cellar is not downstairs. It is actually a temperature controlled, major part of his house. He had a couple of them that were really interesting. And his students, once they would graduate, and get jobs kind of compete with one another to see if they can come up with the most rare wine. He had one that he allowed up to sample that was fermented at fifty-five degrees for a period of time. It tasted more like an apple, a crispy apple. It was very good. His students would send him these samples to get his comment on them, and learn new ways of making wine. That was a spin off from my one week [at Berkley]. So here you have a week that was spent classifying. This went through Federal Committee on Pest Control and impacted directly back on to the Federal agencies, restricting use of chemicals. The FCPC, now that I recall, came out of an organization called the Armed Forces Pest Control Board. I was a member of that when I first started working with the Service. That, I think, was the first real serious effort of restrict the use of pesticides that I can recall. And that came out of the military. And of course, by far, they were the biggest abuser of pesticides of any federal agency. It is to their credit that they made the effort. I am sorry that I can't remember the name of the guy that headed that up. He had quite a bit of insight. But Armed Forces Pest Control Board, the Federal Committee on Pest Control, the Mrak Report, these things lead to the restriction of use of pesticides. And first in the Federal government, before it was applied to private citizens, or to industry for that matter. It was an interesting turn of events.

MR. GROVER: Let's continue on with some of the other activities you were doing while you were in Washington.

MR. MARTIN: When I first got there, I think it was Ken Black said, "Here, take this document, and pay attention to what it says". He handed me this thing called 'the action report' of September of 1971. That was after I had been in that office in Washington for a while. It is put together by Game and Fish Directors or people from the Game and Fish departments; state as well as federal, and private. It outlines, to the best of their ability; people like Bill White who was the Chairman, Ken Black, Ed Glaser, Chester Hart, Archie Hooper, Ernest Martin, Hard Miller, Don Reese, Jerry Stegman and Carl Studsman are names who put this thing together and it really focused on what is it important for the Fish and Wildlife Service to do. What should we take action on? They put together close to fifty things, with elaboration on what was important for the nation's resource management leaders to focus on. That's called The Action Report, and you are welcome to have that.

MR. GROVER: I will append that to the other things you gave me.

MR. MARTIN: I mentioned the organization of the Division of Wildlife Services. How it came out of the Predator and Animal Damage Control operation, which went way back to the Biological Survey actually. It was the major part of Biological Survey when it started all of this Fish and Wildlife Service stuff. So we need to pay a little attention to Predator Damage Control. But I have a copy here from Clifford Presnal who was that last Washington Division Chief of Predator and Rodent Control. It is called "The Hunter's Handbook". And it was put out by the Biological Survey. There are a couple of pages in there that have been clipped with scissors. I think that happened when there was some plagiarism going on to a publication that helped describe things. But I am sure that that is a historical document. I am also looking for my 'yellow dog' information.

MR. GROVER: The Order of the Yellow Dog.

MR. MARTIN: Do you have some information on The Order of the Yellow Dog? It was formed by Teddy Roosevelt to make Congressmen humble.

MR. GROVER: From the Retiree's reunions, there have been ample references to The Order of the Yellow Dog.

MR. MARTIN: I have card somewhere with some notable citizens on it that I got when I went through that. Are you a member of The Yellow Dog? Well, you become a member.

MR. GROVER: You become a member. So the proper answer to that is "Are you an Order of the Yellow Dog?" And the correct answer is?

MR. MARTIN: 'You bet your sweet ass I am!' You mention this in polite society and of course, and earthy response that many times in embarrassing, and of course that's the whole hitch of the thing. Also publications I have here to give you, in case you find others are on pesticides and other contaminants. There are Residues in Fish Wildlife Estuaries, Organo-insecticide residues in Starlings, Mercury, Cadmium and Lead and Arsenic Residues in Starlings, that was in 1971. There is also Mercury and Lead Residues in Starlings in 1970, Organochlorine Residues in Starlings in 1970. I'll give you copies of these, for whatever purpose. There are some of the early monitoring operations that were done.

Another part of the job that I had in Washington was to translate research findings into practical applications to the operations side of the organization. Consequently, I got to know a lot of real fine research people. And I got to spend some time looking on the inside of their operation; and walking that narrow line between findings and publication by peer review. Where you need the information as quickly as you can to use it, but at the same time, it's not a legitimate publication in research until it's been peer reviewed and published. That was a very interesting experience that I had.

MR. GROVER: Do you have an example of one of these?

MR. MARTIN: One of them that came up in Barium County, Michigan involved DDT. The Fisheries people out of Columbia were finding a lot of DDT. DDE was actually what they were looking at because DDT breaks down rather rapidly. That family of chemicals is the same as those that are found in high-tension electrical condensers. Arachlor is the one that comes to mind. What they really found out, when they were just about ready to go to hearings on DDT and DDE was that in fact it was not DDE that was being picked up in the fish. In fact, it was Arachlor, Biphenal-organochlorine.

MR. GROVER: So it was a look alike?

MR. MARTIN: It was very, very similar, almost the same thing. And the DDT was under the gun at the time and soon was to be abolished for all uses in this country. But it is interesting to see how our best knowledge, suddenly at the last minute you say, 'oops'. That is similar to what Law Enforcement found with the Pig gall bladders when they did an undercover study and found out they were looking for Bear gall bladders. There was some illegal use, shipping to China and selling to the Chinese. They were about ready to come down on them in a covert operation, the Forensic Lab down in Ashland, Oregon said, "ho-ho, wait a minute, those aren't Bears, those are Pigs!" These guys were cheating the Chinese into thinking they were buying Bear gall bladders and they were really Pig gall bladders. So these guys aren't really violating the law! That happened just before I retired.

MR. GROVER: I remember that incident.

MR. MARTIN: Those are Ken Goddard's tales!

MR. GROVER: Let's get you out of Washington.

MR. MARTIN: I think it's time we got out of Washington. Did I tell the story about how I got out of Washington because of EPA?

MR. GROVER: No. I think we need that.

MR. MARTIN: Ok, let's do that. How I got out of Washington. I got out of Washington when the Pesticide Regulation Division in Agriculture was transformed into the newly formed Environmental Protection Agency. I was offered a job at a good increase from where I was and I threatened to take it, unless they were to transfer me out to the field. So after much wailing and gnashing of teeth and demonstration that I was not totally indispensable, they did allow me to go to Minneapolis. That's where I joined up with the River Basin Studies, and got out of the Contaminant arena. But then I got right back in, in a year and a half.

MR. GROVER: You went from Contaminants up to the broader program of River Basins which dealt with habitat conservation and the regulatory issues other than pesticides?

MR. MARTIN: Yeah. The River Basin Studies was primarily involved in the waters of the United States.

MR. GROVER: It was a planning function primarily.

MR. MARTIN: It was a planning function and a permit review function. It was Section 10 of the Rivers and Harbors Act that the Corps of Engineers operates. But under the Coordination Act it is required to get the Fish and Wildlife Service review of it. At the time that I went with River Basin Studies in Minneapolis, there was a lot of what they called Level B Planning in River Basins. This was 'how are we going to best use the waters that flow through the basin with the least amount of damage to other interests?' and of course, 'the highest and the best use for the people of the area and the most economic use of that resource.' I was on a number of them. One of the big things that was going on at the time was the Upper Mississippi River, and dredging and dredging operations. Every year after the spring floods and everything, the Corps [of Engineers] would go and dredge out the rivers and move the spoil from the main channel, back into the marshes. Thus, they would destroy thousands and thousands of acres of productive fish and wildlife marshlands. Jack Hemphill was the Regional Director at the time. He came out River Basin Studies. And he strongly supported the effort that we made to call attention to this. We actually went on the road with a slide tape that castigated the Corps of Engineers, and the operation. It was essentially pointing a finger at another federal operation, and saying that these guys are really screwing things. We went public with it with the slide tape. I wonder what would happen today if we tried doing that? The Corps finally backed off. They said if we would take the tape off. I was in Washington with Jack at the time in the General's office. He said that the Corps didn't do things like that; the Corp only did good things. Jack's comment was, "Well, it's happening." And the General said, "Well, someone's lying!" Then Jack said, "Yeah, and I think you ought to look into it." Those are just paraphrases of the words, but it was that intense between the Corps of Engineers and the Fish and Wildlife Service. The up shot of all of that was what they called the Great River Environment Action Team. And I have a couple of buttons.

MR. GROVER: What year are we talking about?

MR. MARTIN: We are talking 1973 or 1974. In 1974 or 1975 the office of Biological Services, OBS, was formed. There was a lot of money for contracting.

MR. GROVER: And everybody with a Ph.D.

MR. MARTIN: Yeah, they were hired at inflated grades. I managed to hold on to some of their money and to actually study the river with an outfit of pluvial mechanics specialists. Those are people who study sand-bottomed rivers, and how they function. These are rivers like the Columbia River and the Mississippi River. There is more action underneath the water than there is above the water in these rivers. The office was in Colorado State University. They have a facility where they can mimic these hydraulic phenomena. It was headed up by a Civil Engineer by the name of Daryl Simons. Then

there is a Research Mathematician by the name of Y.H. Chinn. I managed to get some dollars and apply them to study the river and they did an entire study from Minneapolis to St. Louis. It was called "*The River Environs Environment*". I sent a copy in to Minneapolis for their reference when the river issues were heating up again. There are also a number of copies and back up research down at Leesburg where the Corps of Engineers major research facility is. I think its Leesburg, on the Mississippi. Essentially what it showed was that the Corps was doing the job wrong. The Corps over a period of time, changed. And the river now really cleanses itself with a minimum amount of dredging as a result of these studies that we were doing. That, in my view was one of the first big pluses of OBS. I have here a summary of *The River Environment*. *The River Environment* is about four inches thick. I used to have copies but I am pretty sure that I sent those up to Minneapolis. I kept the Summary and now you have it. If you want more information along that line, go bug Minneapolis Regional Office. It will probably be back in the dusty files.

MR. GROVER: Do you recall at this time, when they were studying the flows and the pluvial mechanics, were they also evaluating the flood control dikes along the river?

MR. MARTIN: Absolutely.

MR. GROVER: It seems that there were two things that were in conflict.

MR. MARTIN: Here you had a free flowing river in Mark Twain's days that naturally flooded, and the River Boats moving up and down, and actually they went all the way to Minneapolis. They went up the Minnesota River as well. When they started putting the dams in, essentially what they did was to build a series of lakes. And pulled the entire river down to Lock 26, to Dam 26 down in St. Louis. There are twenty-six locks and dams, essentially dams that block the river with locks to move the barge traffic up and down. There is a six-foot channel. At one time they wanted to deepen that to nine feet, which is what it is down-river from St. Louis. It goes to nine feet naturally. There are no locks or dams south of there. But it at St. Louis, the Missouri River comes in, and the Illinois River and the Ohio River come in, just south of there down by Cairo, Illinois. Essentially all of the major flowage of the northern part of the country come together in the Mississippi. And south of there it flushes itself and builds the delta, which we call New Orleans where the river is above the town in many places, and the delta that goes off to the west of New Orleans. But that upper part is all so called controlled, well, was it in 1995 or 1996 when it came out of its banks and flooded everywhere? And that's a given. That's what's going to happen all of the time.

MR. GROVER: Were there other issues that you were involved in at the time, or was the River Studies your major interest?

MR. MARTIN: That was the big one. And eventually in all of our field offices. Joe Scott, if you want to visit with him; Joe was the Field Supervisor out of the Minneapolis office. He was the troop that blooded his spear more than once on Corps of Engineer shields. He would have some interesting comments to make on this part of our history.

But the upshot of the whole thing was that this was a great River Environmental Action team. It was made up of the states, Corps of Engineers, Fish and Wildlife Service; everyone was holding hands, trying to do the right thing. I even had a button that shows that! I was just reading the paper the other day, and it looks like they're at it again on the river. The Corps and the Fish and Wildlife Service are [in it] forever. As long as it is profitable to ship grain in the wintertime.

MR. GROVER: Well you didn't spend all of your career in Minneapolis. You indicated earlier that you moved on to Denver. Can you talk a little bit about Denver now?

MR. MARTIN: Yeah, I got in trouble there too.

MR. GROVER: You got in trouble in Denver?

MR. MARTIN: Yep.

MR. GROVER: What was your role? What were the things that you were involved in?

MR. MARTIN: The big thing in Denver to start with, was the Garrison Diversion, and I stepped right smack dab in the middle of that one. It was a very, very interesting part of my career. The whole machination of the thing is the diversion of water, the Missouri River, eastward through the agriculturally productive parts of North Dakota, with irrigation going out and drainage coming back.

MR. GROVER: So the water was being diverted across the agriculturally productive areas of North Dakota and apparently to Billings Lake, that was the other issue?

MR. MARTIN: Um-hum.

MR. GROVER: And waterfowl?

MR. MARTIN: Waterfowl was the big consequence of not, of well, the major waterfowl breeding area of the United States. Well, in North Dakota and going up into the Canadian provinces. The objective of the Bureau of Reclamation, which was heading this one up, was to provide water from the Missouri River almost across to the Red River in the north, and certainly to the Devil's Lake basin. Then diverting it out of Devil's Lake down the Sheyenne River in North Dakota down into South Dakota. It would eventually go back into the Missouri River. That country is full of salts. It is a high alkaline soil, and all of that stuff, with the water going through and returning through drains and whatever structure, eventually your water develops a salinity that can get right up there with the ocean and the Great Salt Lake. Some of this was starting to happen. You actually have many areas around the country; southern California, farmland out side of Fort Collins, Colorado, all where you've had irrigation return flows where the irrigation water seeps the salts out. The return flows bring them back, concentrate them and put them on again. Essentially, you kill the soil. There were a whole bunch of things like that. But the primary problem was the waterfowl production. It was major, major thing. This was in

1984. The Garrison Diversion Unit was studied. And I've got a report to the Secretary and a report to the Congress, and everyone else. There is all kinds of legislation coming out of thing. I have a list of name for you that includes probably everyone that's ever been involved in Water Development. The final report of the Garrison Diversion Unit, December 20, 1984. You can have that. This is when Galen and I started to split the blankets. The preliminary file has more dirt in it and it came out on December 5th. You can have that too.

MR. GROVER: Galen you referred to is Galen Buterbaugh?

MR. MARTIN: Yes. This is the beginning of a very interesting and pleasurable turn in my career. Galen and I just didn't see eye to eye on where we stood as far as the resource was concerned. I came out of a background of thinking nothing of stating is as it is, as I saw it, and taking the consequences, and having it out in public. This was new ground for Galen I'm sure. And I give him credit for his background, which was Hatcheries primarily, and Fisheries.

MR. GROVER: He was the Assistant Director of Fisheries at one time.

MR. MARTIN: I give him credit because it could have been very intimidating for a man in his position as the RD. But we got through with the attorneys from everybody. And the Audubon Society; incidentally, I have an award for the Garrison Diversion that came from the Audubon Society. I've got a picture in there that is that award. It's called "The Mallards". I think there are thirty-two of these that were given out, and I received one of them for the work I did on Garrison. It was for protection of the resource, and not looking for the compromise, letting someone else compromise. This continued on and we got through that ok. But the Plate River and the Denver water supply came up and I saw that about the same way that I did when they wanted to build a reservoir, in this case, in a Fisheries area that just wasn't a really good thing to happen as far as fish and wildlife resources are concerned. Galen had been threatened I'm sure, a couple of times, with his job and was very much concerned that I was not following company policy or his policy. In addition, he wanted to move one of my people that had worked very hard on the Garrison, because he was being pressured from somewhere else. One thing led to another, and my job was re-advertised again. This is when I didn't get my job back; I got my job with Fisheries.

MR. GROVER: What this a period of reorganization?

MR. MARTIN: No, just job vacancies. Danny Reagan retired. So my job was advertised as well as Danny's, and I got Danny's job. Maybe there was reorganization there, I don't know?

MR. GROVER: I was just wondering how your job could be vacant if you were in there.

MR. MARTIN: Well, there must have been reorganization in there.

MR. GROVER: Maybe they called it something else.

MR. MARTIN: Yeah, there had to have been reorganization.

MR. GROVER: Either that, or they called it something else.

MR. MARTIN: That's how they do things sometimes.

MR. GROVER: That was around 1984 when Frank Dunkle was Director? He was moving Personnel out of Washington and upgrading some field positions.

MR. MARTIN: It was in 1985, 86 or 87, somewhere in there.

MR. GROVER: They changed your job, and changed your job title and it became vacant and you had to apply for your own job. And you didn't get it?

MR. MARTIN: Yeah, I didn't get it.

MR. GROVER: Then you moved over to 'Fish'?

MR. MARTIN: So then I moved to 'Fish' and I didn't know the first thing about fish or fish hatcheries, which was a major part of that operation. I don't think there was much Service, it was all Hatchery operations. That's also when I got to know Dale Hall real well because he was heading up Fish at the time in Washington. He dealt with the Indians too. The Service part of Fisheries at that time was dealing with the Tribes, developing Fishery resources. Dale came out and we did some introduction around the region. I got to know how you took "itty-bitties" and grew them up to be "big mommas", and they produced eggs and so on. We had a couple of stories on that line. Actually there was a very interesting group of people in the Hatcheries particularly. I thoroughly enjoyed that time in my career. It was an interesting apprenticeship type of organization that the Hatcheries had, and still do, I think, I hope. Also, in the Service part of it, I was getting acquainted with some of the Tribal things. I went all the way across the high line of Montana meeting with one Tribe after another. We took this one road, I forget the name of it, but it starts at the big reservoir and goes all the way across.

MR. GROVER: I think that's U. S. 10 isn't it?

MR. MARTIN: U. S. 10, right.

MR. GROVER: It's that Highline Road, where you start in Browning and go across.

MR. MARTIN: Yeah. We had a visit with Bill Maxon. We stopped and met with every Tribal Council all the way across there. I don't know how many, but there's a bunch of them. We were pretty much flushing out what they were doing, and what we could do to assist them and still stay out of their hair. When I reflect back on some of the history that I have read then, and since then, some of those Tribes are really key to the development

of the western United States, particularly the Blackfeet and the Lewis and Clark. If they had been a little bit faster, neither one of those guys would have made it back. [Chuckling] And we probably would have lost the west coast to the British. Let's hear it for the slowness of the Blackfoot Tribe! I guess I minded my manners with the Fisheries guys.

MR. GROVER: And that got you sent to Portland?

MR. MARTIN: Yeah. And Dunkle was still... Actually my appointment to the Deputy job in Portland was signed by two Assistant Secretaries or two Secretaries, I think. There were the outgoing the in the incoming ones. My transfer was right at that cusp when one left and the other came in.

MR. GROVER: There was a change in Administration. [President]

MR. MARTIN: Yeah, there was a change in Administration. One of them left and I thought I had a signature, but I didn't. So I got the other one, just in case, because it was important to get out here. And that's how I arrived out here, with the Spotted Owl stuff. I think that most of the Spotted Owl stuff could be reported on, on and on. It's interesting to watch something like three or four Administrations in Washington coming and going. I think that all together there was something like six of them, maybe more. But one thing that always struck me was that the big staff of the political or elective side of the government is always very much astounded and can't hardly believe it's happening when they are asked to leave. And the ones coming in are always more than enough arrogant to handle the humility of the ones leaving. And when the arrogant ones finally get to the point of leaving, they are equally humiliated. It seems to be a cycle that goes on and on. It's the only thing that seems to be consistent between Administrations. The worst thing I ever heard was, "We just got ourselves elected, and we are really going to help you guys". When I heard that, I knew that we were in deep trouble.

MR. GROVER: But you were out in Portland anyway, and you had Spotted Owl on your dinner plate? And you had Columbia Basin stuff, and California; the Caster Simmons and The Bay?

MR. MARTIN: Yeah, all of that. Part of the deal with me coming out was that Marv [Plenert] would be the front man, and I would run the office, and be a silent advisor. I would keep as low a profile as I possible could, and let Marv to the running and have the visibility. I guess that was a good decision when you really think back at it, because with my personality and background I probably would have gotten the Service into trouble again. Particularly if the position gives me more opportunity to just lay it out, and where more diplomacy is needed. I have always had difficulty with diplomacy. [Laughing]

MR. GROVER: So you're beyond diplomatic operator of the Regional office, which consisted of three hundred and some folks. There were three hundred and twenty-five people in Administration and Programs. Did you get involved much with field folks much at that time at all?

MR. MARTIN: Yeah, I got involved quite a bit with the people down at Reno, because you needed a presence at the Truckee River. It was one of the Bureau of Reclamation's oldest projects. Incidentally, it was their first one. It was when they diverted water from the Truckee River. The Pyramid Lake started to dry up and destroy the habitat for the Kiwi. I think that had been fixed about as good, well, we can always fix it better. But I think that the Tribes now are getting into reasonably pretty good shape. What do you think about that? You are familiar with that.

MR. GROVER: It's your interview! [Both laugh] I was a Supervisor down there too.

MR. MARTIN: That was a tough situation.

MR. GROVER: This is the story you are talking about with Marv?

MR. MARTIN: It was probably better if John Dobel took that job down there representing the Service on the Truckee Carson. Even when I was trying to behave myself, apparently I couldn't. In southern California, that's a god-awful mess. I take my hat off to anyone that can operate down there successfully for more than three years. There is just blatant materialism, grabbing what they can and to hell with what happens. That was my experience in southern California; from again, I ought to very carefully put that into a proper context from a Fish and Wildlife perspective.

MR. GROVER: It seems that you are getting into a reflective mood now, you are reflecting on some of the issues that the Service was involved in. That is a difficult area down there in southern California.

MR. MARTIN: Oh yes, it is.

MR. GROVER: You had the Kesterson on your plate at the time.

MR. MARTIN: See, that's getting back to what you start out with, is what you end up with a lot. Some of that early work was... I can't remember the name of the Research Biologist who did the work. I wish I could. But there was a lot of research on the eggshell thinning stuff, and why the Brown Pelican was dropping in numbers. He did some really fine research on that subject. Of course it came back around to the DDT type chemicals.

MR. GROVER: And Selenium?

MR. MARTIN: Yeah. And then as an upshot to further more of the same. There was the Sacramento "B" and our River Basin Biologist, Felix Smith.

MR. GROVER: Felix Smith who was with the Ecological Services office down there.

MR. MARTIN: Yeah, he's retired. Incidentally, I hope he is still around. He got himself crosswise with a whole lot of people with this business with Dunkle and with Rolf Wallenstrom and whatever. But "Fee" was one of the people that got out there. And really, they did identify Selenium as a major problem with the " terratogenesis" [sic] I can't even say it, the embryotic modification by the chemical that results in crossed bills, no bills, no feet.

MR. GROVER: Physical deformities.

MR. MARTIN: It's very, very terrible physical deformities. And essentially you've got an elemental chemical, Selenium, actually acting as a worse character than some of the worst chlorinated hydrocarbons that we had dealt with in the fifteen years before that.

MR. GROVER: Were you involved in any of those meetings down there Bill?

MR. MARTIN: Some of them. Again, there are certain mindsets that Engineers seem to get, or Hydraulic Engineers, is that when you really get up against it with a water problem, with a contaminant problem, they're not all that concerned about the quality. They are very much concerned about quantity of water. Maybe they are teaching in Colleges now, about the quality of it. But during my time, if you had an Engineer and you had water, you had dams or some other mean of either getting the water on or off, or holding it or getting rid of it. There was nothing whatsoever about maintaining its quality or its utility from a biological perspective, or a physiological perspective. Down there in that country it was the same old story. The thing to do is to dilute it, and keep diluting it. In my experience that was about the end result of where they were on Kesterson, was to dilute it.

MR. GROVER: Ok, that's the old adage that the 'solution to pollution is dilution'.

MR. MARTIN: That's right. It's the same old thing. And it ain't gonna work.

MR. GROVER: And this water was running right down the San Joaquin and into the Bay Delta where you had listed species.

MR. MARTIN: That's right. You've got the Bay Delta, and what are you gonna dilute it with? I mean, you've already flushed the toilet. You can't put it back in and flush it again. Essentially, that's what they were trying to do. But every time you run it through that canal out through the fields and into the drainpipes and back into the canal, you've added more salts, and built up more of the capacity to poison the soil and poison everything else. So, to make the desert bloom, just add water, is a promise that can't be kept. Because what you'll do is get a temporary bloom, very temporary, for ten of fifteen years maybe, and then you look at fifty to a hundred or maybe five hundred years of death before nature can come back in and get that back in shape again. And that is usually by burying it, by covering up with something else and producing vegetation of some kind.

MR. GROVER: Bill, I'd like to ask you a little bit now... with your career with the Fish and Wildlife Service, what do you see as some of the biggest changes? Let's talk about changes for the good, and perhaps changes that weren't so good, that you thought cost the Service.

MR. MARTIN: I don't know, that gets into a lot of sensitivities I guess, because we are in that 'feels good' and political correctness and whatever. When I came into the Service business was done in the motel room, and a "Yellow Dog" was the important thing to be. Once you had a word, or informal agreement, then the formal agreement was just on the way. You had to put it on paper but there was no question that it would be there. The Service was a small organization. It was a very unique organization. It was made up of people where really there was no question at all as to their commitment. There were no ulterior motives in my view. Of course, I was younger then and much less cynical than I am now. Business was done by a handshake and a person's word. Neither of those things hold today. The organization is just another federal organization, in my view. Perhaps it does good things, and maybe that's the way to be. But I think when the Service started reaching out and getting involved in all of these many different things, and trying to be everything to everyone, I think it lost a great deal of its character. I guess I lean more toward Refuges and their attitude about a lot of things. Refuges is a very tight knit organization. Fisheries are not quite so because they don't have the luxury of the political support that Refuges has, but it's the same kind of thing.

MR. GROVER: Law Enforcement? Is that a tight knit group?

MR. MARTIN: Law Enforcement, perhaps there is a little bit of that. As my career closed down, that's where I gravitated, to those sorts of things. I am still tracking Law Enforcement a lot closer than others. Just because of the people. And I think we've got people in the Service now that couldn't give squat about the resource. I think it's a means to an end for many of them. I think that maybe if I was to point fingers I'd point this one at Jimmy Carter and the CSC.

MR. GROVER: CSC, the Senior Executive Service.

MR. MARTIN: It came in under Jimmy Carter, but he didn't know what the hell it was. And it took until Ronald Reagan for it to really be effective in making the Fish and Wildlife Service a political animal answering to political calls. Right now there are Deputy Regional Directors [that are] political, *can you believe that?* When I started in the Service there was one, that was the Director, and that wasn't a hell of a lot. Actually, the top political animal was the Assistant Director for Sport Fisheries and Wildlife, and Commercial Fisheries, which were two bureaus at the time. They had a name for that character.

MR. GROVER: Commissioner, I think they called him.

MR. MARTIN: But that was the top political spot. Yeah, that was his name, his title. Now it's crept all the way down through. We are so much concerned about how we look

as an organization. I read the Fish and Wildlife Service publication. One thing is that it is slick. And anytime I read something that is slick on all pages I say that those people have too damn much money and they are too interested in impressing somebody. That's goes way back to my training in public relations and administration. [Laughing] That does it, usually, when you have a publication like that. Anyway, that's a bias. The thing is filled up with so much diversity, political correctness, touchy feely kind of stuff, that I wonder where the hell the resource is. There are very few articles of substance on anything in that publication. You might as well throw it out.

MR. GROVER: You are talking about the Fish and Wildlife Service newsletter? Would that be the proper place to put items of substance in, as opposed to regular papers or reports or other stuff?

MR. MARTIN: I would think that things [having to do with] the Services resource accomplishments. You pick up TNC, an organization that I very strongly support; The Nature Conservancy. You pick up their publication and what do you see? First of all it's not slick, second of all, it has articles of substance in it. That's their monthly or quarterly publication. And they are a growing organization. And strangely enough, they started out as a bunch of attorneys, can you believe? That is the second least believed people or profession, first being used car dealers, in the United States according to some surveys. It is made up of a bunch of attorneys, but they are committed. They have an objective. What about the Training Center, what's really happening out there? I think you could do a pretty good article about that. And you don't need a whole bunch of pictures of people getting awards. Here is a retiree looking at the organization as it is functioning now. If I was getting an award, maybe I'd feel real good about having my picture in the paper, I don't know. It's been a long time since I had that feeling! Because I got cynical early! Here's a very personal thing that maybe will illustrate my point; when I came into the Service, the Regional Director was someone you could look up to and respect. When I left the Service, soon after I left the Service, the Regional Director was very much concerned about having a baby. That ain't the Fish and Wildlife Service. I'm sorry, it ain't. First of all she's too young. Second of all she doesn't have the experience. Third, she's really going off on the wrong angle. She doesn't have any kind of advice that she can use or will use. But that's the Regional Director. That's a personal bias. Maybe she's a good person. I don't know her personally.

MR. GROVER: Bill, I'd like to ask you; in your career is there one issue that the Fish and Wildlife Service had to address which you thought was overriding, or kind of marked the center point? You kind of picked on Contaminants.

MR. MARTIN: All through my career, it's a lot like horses. Ever since I was a kid, horses trailed me. I haven't really found them to be all that great as far as my interest. They have always been a kind of a tool to me. But they pop up at all of the time in my whole life. A horse pops up. I married a woman who is crazy about horses. And it's the same thing with Contaminants. I started off in that area and of course didn't know anything about it. I learned a lot. A pharmacologist took me aside. And here again, I can't remember the names of the people that I really find that are great. But he explained

in about six months or a year, organic chemistry to me. So to this day, I think I've got a pretty good grasp of organic chemistry that I never got in college. And I got it from a strange pharmacologist who didn't want to drive with his headlights on. He wanted to drive with his parking lights on because the headlights burned up too much electricity. This is the guy who is going to explain organic chemistry to me! And he did a wonderful job at it. I think that for the times, I think Spencer Smith did an outstanding job. He was given a really tough set of circumstances. And I think he did a really good job. One of the top of the list in my view was my boss, when I went to a number of different jobs. That was Jack Berryman. Jack was fighting alcoholism for his whole career. He got on top of it and when he came to Washington from Utah the Utah Co-op Unit. Of all places for an alcoholic to be, Utah. I think that he may have fallen off once or twice. But boy, you've got to give that guy credit. J. T. McBroom, that was the guy I was trying to think of. J. T. McBroom was Jack Berryman's nemesis. Every time Jack tried to do something useful, McBroom would come down and crap on it. McBroom's background was Geography. He had a degree in Geography. There was Jack Hemphill. You were either for him or against him. Some people said that he was an out of control missile. Hemphill and Berryman were the two Supervisors that really made a difference in my career. I rank them right up there at the top as far as managers go.

MR. GROVER: Is there anything else that you would like to add for the record Bill?

[tape ends]